

# Applying IT Services Business Relationship Management on Security Outsource Company

Indra Kharisma Raharjana  
*Information Systems*  
*Universitas Airlangga*  
 Surabaya, Indonesia  
 indra.kharisma@fst.unair.ac.id

Susmiandri  
*Information Systems*  
*Universitas Airlangga*  
 Surabaya, Indonesia  
 susmiandri-13@fst.unair.ac.id

Army Justitia  
*Information Systems*  
*Universitas Airlangga*  
 Surabaya, Indonesia  
 army-j@fst.unair.ac.id

**Abstract**— Most outsource security companies have not implemented information technology optimally. A company must implement information technology that is oriented to customers and stakeholders to be competitive. Outsourcing security companies need to apply a systematic approach for managing customer-oriented services. In this study, we implemented business relationship management based on Information Technology Infrastructure Library (ITIL) framework to develop a service strategy, especially for an outsourced security company. There are 5 stages of activities carried out, namely identifying stakeholders, defining business outcomes, establishing strategic and funding requirements, defining business cases, and validating business activity patterns. Verification and revision of customer requirement analysis are performed to validate and evaluate the results. The result of implementing business relationship management is the recommendations of four IT services that suits the organization. The four IT service recommendations are websites, CRM services, monitoring services, and ordering services. Business case documents for each service have been created to identify business impacts and risks.

**Keywords**— *relationship management, service strategy, ITIL framework, customer requirements analysis, IT service strategy.*

## I. INTRODUCTION

Outsourcing is the process of hiring labors or services from a party outside a company to perform a specific task [1]. Companies tend to hire outsourced employees on the grounds of cost savings, focus on business strategy, gain professional labor, and use of the latest technology [2]. Outsourcing companies are required to always have a competitive advantage as more and more similar competitors company.

Currently, many security outsourcing companies engaged in the provision of labor [4]. This competition makes the company must be competitive, for that customer requirement analysis becomes important [5]. Information Technology (IT) services adoption in organization is believed to provide a competitive advantage [3]. Unfortunately, IT adoption rate in these companies are very low. IT is mostly only used for administrative activities, not yet integrated with business processes [6]. It can lead to ineffective service quality and low competitiveness.

When implementing IT services, organizations need to know their customers' requirements. IT services implemented should not only focus on the technology, must also pay attention to the quality of service and customers relation [7]. Customer requirement analysis is a systematic way of exploring customer requirements and expectations.

Customer requirement analysis can be done using the Kano[5], data analysis[8] and quality function deployment[9]. However, these methods can only identify and prioritize customer needs, not focus on preparing strategies and recommendations for the implementation of IT services. Information Technology Infrastructure Library (ITIL) framework provides practical guidance on IT service governance[10]. ITIL has been commonly used in various industries because it is considered to reduce the failure of the implementation of IT services, improve service and customer satisfaction and save costs[11]. Business Requirement Management (BRM) in the ITIL framework discusses how to connect service providers and customers at a strategic and tactical level so that service providers can understand customer needs for IT services [12].

In this study we propose for applying IT Services Business Relationship Management for identifying Customer Requirement Analysis in security outsourcing company, so the company can plan IT requirement in integrating its business process. This study applies the method of Business Relationship Management in the Information Technology Infrastructure Library (ITIL) framework to perform customer requirement analysis. We use one security outsourcing company as a case study of IT services business relationship management. because it only uses one company as the case study, the results of this study may not be generalized to all outsourced security companies.

## II. METHODS

This research method has several procedures including identifying stakeholder, define the business outcome, specify strategic requirement and funding, define business case, validated business activity pattern, and verification and revise customer requirement analysis. The procedure is illustrated in Figure 1.

### A. Identify Stakeholder

This stage aims to find out stakeholders who are involved and influential. The input of this stage is information about who are the parties or stakeholders involved in business activities. Information about the parties and stakeholders involved is obtained through interview. Stakeholder mapping analysis is conducted for stakeholder classification [13]. Stakeholders are classified into 3 groups: stakeholder salience, dependency level, and stakeholder power interest grid. After the grouping, the next step is to determine the most prioritized

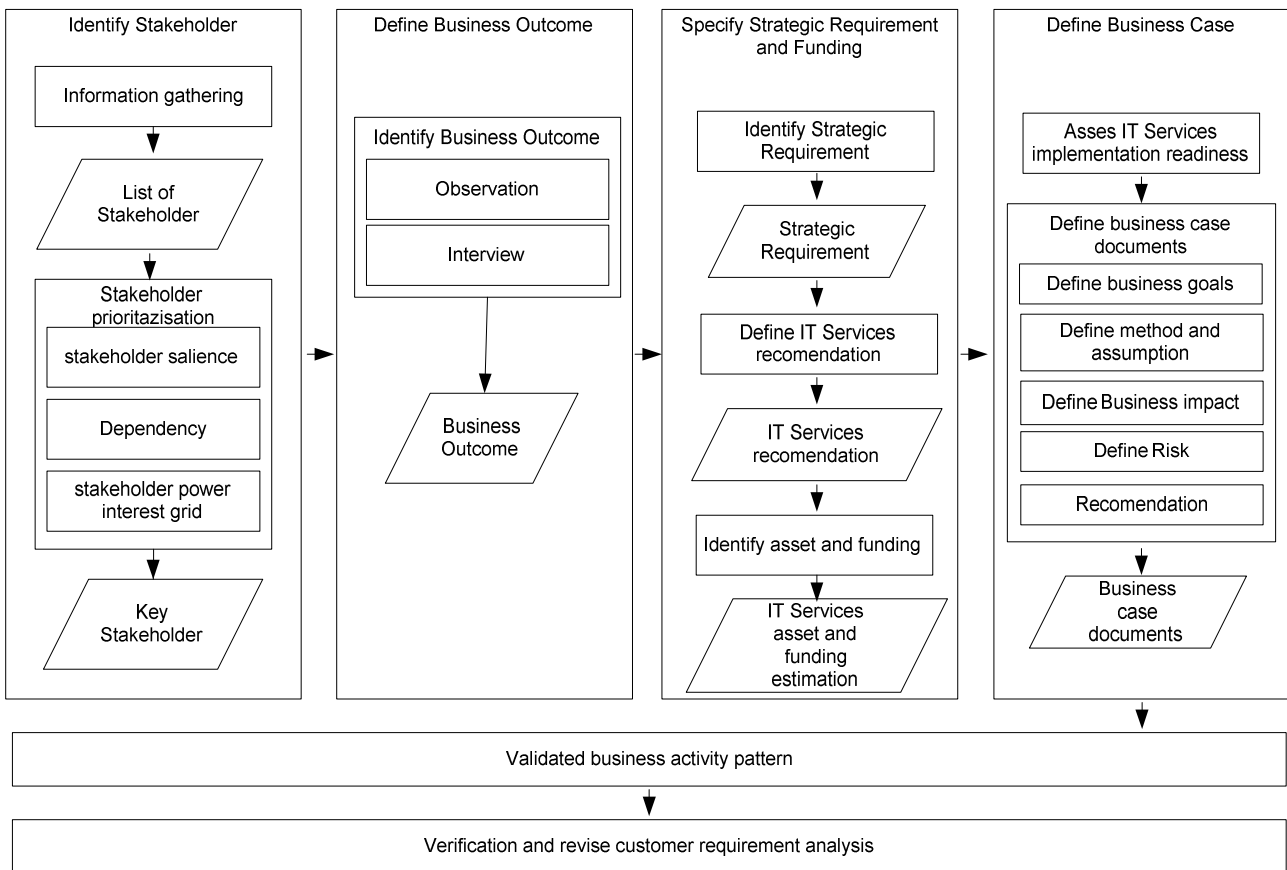


Fig. 1. Step of Customer Requirement Analysis

stakeholders by selecting the stakeholders who belong to all the groups, called key stakeholder.

**B. Define Business Outcome**

The purposes of this stage is to determine what business outcome should be met by IT services. Key stakeholders are interviewed to get information on the business outcome should be implemented, the constraint to be faced, the desired requirements, and expectations of each key stakeholder on IT services. The value to be achieved by the IT services must be ensured during the interview. So the IT services can have value for each key stakeholder and reduce the constraints.

**C. Spesify Strategic Requirement and Funding**

This stage aims to identify strategic requirements and funding requirements. The input for this stage is a detailed list of the business outcome obtained in the previous stages. Discussions with key stakeholders are done to establish a long-term strategic requirement. Appropriate IT service recommendations are made based on the results of discussions and best practice studies. Details of the funding and assets required for the implementation of IT services are estimated to get a complete picture.

**D. Define Business Case**

A business case is a decision support and planning tool to project the consequences of a business action taken [14]. Business cases are used as materials to support decision-

making and planning related to the application of IT service recommendations. business case documents created for prioritized IT services. The document contains business objectives, limitations, business impacts, risks of implementing each IT service, and recommendations to avoid risks.

**E. Validated business activity pattern**

This stage is done to know the pattern of business activity in order to estimate the workload of each IT service. The analysis is done by looking at business case documents to find out which business activities are related and knowing who the users are from each IT service. Interviews with users of IT services to gather information about the pattern of business activity.

**F. Verification and revise customer requirement analysis**

At this stage, the verification of the results of customer requirements analysis conducted. The verification process involves managing director and customer. Through interviews and form verification by stakeholder, about the appropriateness of the results, with the opinions and expectations of both parties.

III. RESULTS

**A. Identify Stakeholder**

There are 14 stakeholders involved in the service or business activity. The party is president director, marketing

TABLE 2 LIST OF THE BUSINESS OUTCOMES

Name	Business Outcomes
President Director	1. IT Services that can help monitor Key Performance Indicator.
Marketing Department	1. IT Services to support marketing 2. IT Services that allow to build trust and good relations with customers and prospective customers
Finance Department	1. IT services that can assist in managing payroll 2. IT services that can be a reminder of customers to make payments 3. IT Services that applied were able to notify automatically who are the customers who have made the payment and display some payment details
HRD Department	1. IT services that can help organize shifts for workers security 2. IT services that can help facilitate the making of a report of security personnel work portion. 3. IT services that can help the recruitment process 4. IT Services to create alternative communication methods to expand access to field coordinator.
The Field Coordinator	1. IT Services that can help monitor the labor security 2. IT services that can add access to communication with the customer for better and efficient monitoring
Customer	1. IT services that can simplify the process of absentee 2. IT services that can be used to mreview the performance of the security 3. IT Services that can facilitate in obtaining general information of outsource company 4. IT Service which can provide alternate communication with the marketing department 5. IT services that are able to provide an alternative way to process bookings 6. IT Services to provide information nical regarding payment

TABLE 3 LIST OF IT SERVICES RECOMMENDATION AND STRATEGIC REQUIREMENT THEY CAN ACHIEVE

Strategic requirements that can be met	Recommended IT services
1. IT Services that can facilitate in obtaining general information of outsource company 2. IT services to support the existence of organisation to be more recognized	Website
1. IT Services which can help the process of recruitment guard	Recruitment Service
1. IT Services that can build trust and rapport with customers and prospective customers 2. IT Services that can increase access to communications with customer in order to create a process monitoring better and more efficient	Customer Relathionsip Management (CRM) service
1. IT services that provide to review the performance of the security 2. IT services can assist monitoring labor security	Monitoring Service
1. IT services can help arrange shifts for workers security 2. IT services that can facilitate the attendance 3. IT services memperm already preparing reports on the long or the work portion of the labor security, for the benefit of the payroll	Labor Arrangements Service
1. IT services that can provide information about the payment details 2. IT Services that applied were able to notify automatically who are the customers who have made payments 3. IT Services can be a reminder of the customer to make payments	Payment Services
1. IT services are able to provide an alternative way for the ordering process more efficient	Ordering Service

department, legal department, human resources department, finance department, supervisor, security labors, customer, paid media, regulators, tax directorate, notary firm, competitor, and Indonesian Security Services Company Association.

From stakeholder mapping analysis using stakeholder salience, dependency, and stakeholder power interest grid [13], showed that there are 8 key stakeholders. Namely: president director, marketing department, legal department, human resource department, finance department, supervisor, security labor, and customer.

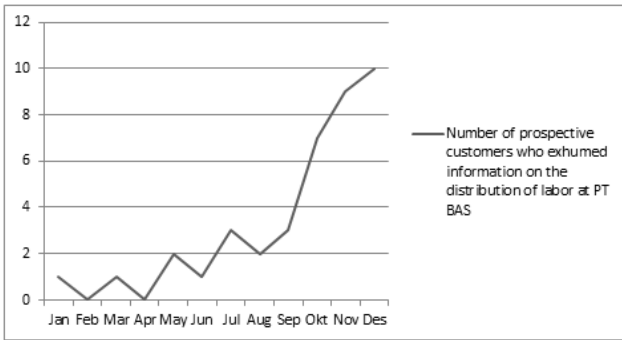


Fig. 2. Pattern of Business Activity for Website

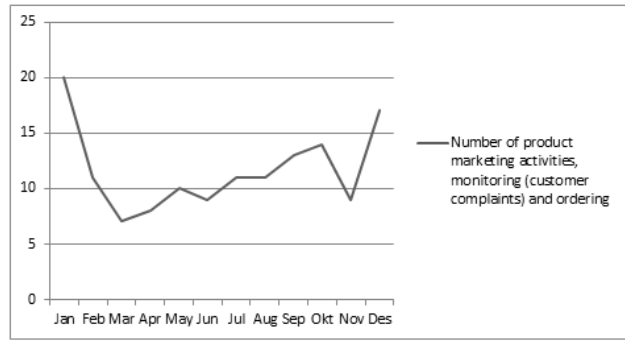


Fig. 3. Pattern of Business Activity for CRM Service

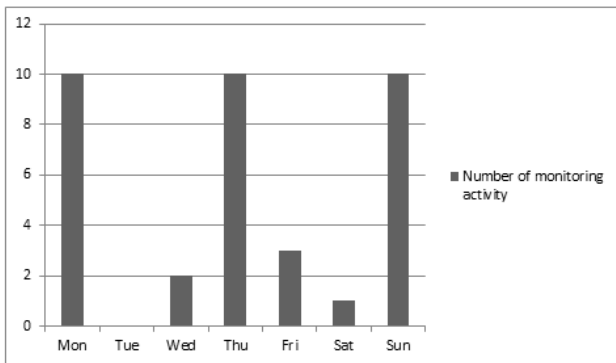


Fig. 4. Pattern of Business Activity for Monitoring Service

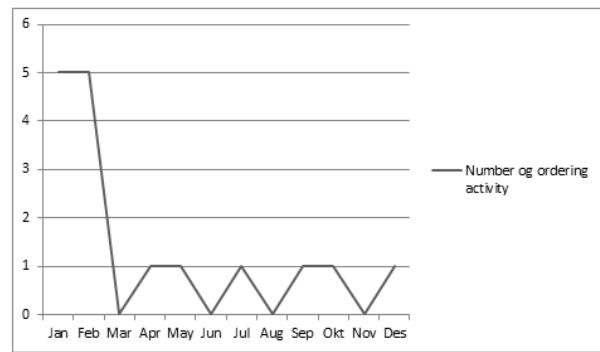


Fig. 5. Pattern of Business Activity for Ordering Service

**B. Define Business Outcome**

Interviews were conducted with 8 key stakeholders. Table 2 is a list of the IT services business results expressed by key stakeholders.

**C. Specify Strategic Requirement and Funding**

After discussions with stakeholders (security outsource company and customer), the strategic requirement is determined in based on business outcomes. Once the list of strategic requirements has been obtained, the next to do is casting ideas of IT Services to be recommended. The list of IT services recommendations from the strategic requirement depicted in Table 3. Estimation of the assets and the funds required to implement the recommendations of the IT services are calculated.

After a detailed estimation of IT services, assets and funds are completed, the next step is to conduct an interview with the finance department to determine the readiness of IT services related to their implementation. At present, the organization prioritizes four IT service recommendations: Websites, CRM services, monitoring services, and booking services.

**D. Define Business Case**

In this stage, the business case documents were created. The business case documents were prepared by defining business objective, the business case boundary, business impact, the risk and contingencies for each IT services.

**E. Validated business activity pattern**

The website Business activity was extracted from information regarding the distribution of labor services performed by prospective customers who ask about the distribution system of labor services offered. From interviews obtained information about the number of potential customers who inquire about the employment service delivery system (depicted in Figure 2).

Business activities related to the implementation of CRM services were marketing, monitoring, and reservations. Number of product marketing activities, monitoring, and ordering is depicted in Figure 3. Based on the results of an analysis of factors that may affect changes in the pattern of business activity, it can be estimated that the workload of CRM services is mostly used at the beginning of the year, followed by end-of-year usage.

Number of monitoring activity is shown in Figure 4. Based on number of monitoring activity and the results of an analysis of factors that may affect changes in the pattern of business activity, it can be estimated that the workload of monitoring services will be widely used on Mondays, Thursdays, and Sundays. However, due to the possibility of unannounced monitoring that can be made at any time due to a customer complaint, the performance of the monitoring service should also remain good on other days.

Booking service is used to simplify the ordering process of labor security guard. Number of ordering activity is depicted in Figure 5. The results of the analysis of factors that may affect

the pattern of business activity, it can be estimated that the workload of the booking service will be widely used in January and February, however, due to the possibility of many orders also in other months, of the booking services in other months should also remain good.

#### F. Verification and revise customer requirement analysis

The data from the customer requirements analysis results are shown to perform verification processes involving the company and its customers. The verification process performed on the organization involves the head of HRD. From the results of interviews and filling the verification form, obtained information that the results of customer requirement analysis that has been shown, in accordance with expectations. Head of HRD said that the results of a customer requirement analysis can be a consideration and a good source of information to make the implementation of IT services in the company. In addition, the recommended IT services also fit the requirements and conditions of the organization.

The subsequent verification process is done to the customer. From the interview result, it is found that the result of customer requirement analysis has succeeded in defining and conveying requirement from customer side. The recommended IT service also can fulfill customer requirement.

#### IV. DISCUSSION

The stakeholder continuously involved through interviews, and discussions so we get feedback needed. There are several obstacles in conducting this research, such as difficult access to interviews with customers, because of this limitation there was only one customer to be interviewed in this study. The interview was also conducted with one representative from each section or division at the organization. Other obstacles that arise are data and documents are clasified to parties outside the organization. We cannot analyze documents or data to ensure the course of business and financial conditions.

This study is a continuation of the study [6] which aims to identify IT strategic requirement, especially for security outsource company. both studies apply the process from ITIL framework. Previous studies [6] focused on the strategy management for IT services process, while this study focused on the process of business relationship management.

This study applied business relationship management as an IT service life cycle strategy. In contrast with the previous study [15] [16] that used the business relationship management concept in the organization that had implemented IT services. this study explores the application of business relationship management to organizations that have not implemented IT. the challenge is to provide understanding to stakeholders regarding the benefits and strengths of IT in providing competitive advantages within the organization.

Furthermore, several matters related to information technology governance and information technology service management can be done in security outsource companies to strengthen competitive advantage. for example, designing enterprise architecture planning [17] [18], creating standard operating procedures for service implementation [17], applying

checklists for crucial matters [18], or strengthening governance in the organization [19] [20].

#### V. CONCLUSION

This study demonstrates that the process of service strategy for business relationship management that exist in the cycle service strategy on the ITIL framework, can be used as a basis in the manufacture of strategy and planning for the implementation of IT services, in accordance with the requirements of the company and its customers, which it has yet to implement a service IT. The results of this study may not be applied to all the outsourcing company. This is because of differences in business processes that are running and the problems faced by each company. Therefore, it needs adjustment to find out the outline of the requirements of the outsourcing company and its customers, in order to determine which strategy is general and flexible, so it can be applied to all outsourcing companies.

#### REFERENCES

- [1] F. Malik, B. Nicholson and S. Morgan, "Assessing the Social Development Potential of Impact Sourcing," in *Socially Responsible Outsourcing*, Springer, 2016, pp. 97 - 118.
- [2] M. Belcourt, "Outsourcing — The benefits and the risks," *Human Resource Management Review* 6, pp. 269 - 279, 2006.
- [3] Purwanidjati and S. Rahayu, "Penerapan Sistem Outsourcing di Perusahaan Swasta dalam Perpektif Perlindungan Hukum Hak-Hak Pekerjaan Kontrak," *Jurnal Hukum*, pp. 1-16, 2010.
- [4] T. Wang and P. Ji, "Understanding Customer Needs through Quantitative Analysis of Kano's Model," *International Journal of Quality & Reliability Management*, pp. 173-184, 2009.
- [5] M. Marrone, F. Gacenga, A. Cater-Steel and L. Kolbe, "IT Service Management: A Cross-national Study of ITIL Adoption," *Communications of the Association for Information Systems*, pp. Vol. 34, Article 49, 2014.
- [6] L. Wijaya, I. K. Raharjana and E. Purwanti, "Strategic Management for IT Services on Outsourcing Security Company," *Journal of Information Systems Engineering and Business Intelligence*, pp. Vol. 4, No. 1, pp. 46 - 56, 2018.
- [7] R. Kurniawati and A. D. Manuputty, "Analisis Kualitas Layanan Teknologi Informasi dengan Menggunakan Framework Information Technology Infrastructure Library V.3 (ITIL V.3) Domain Service Transition (Studi Kasus pada Customer Service Area Telkom Salatiga)," *Jurnal Teknologi Informasi-Aiti*, pp. 31-45, 2013.
- [8] J. Sipatuhar, "Analisis Kebutuhan Pelanggan Potensial Produk PT. HM. Sampoerna, Tbk Cabang Medan," *Jurnal Ekonomi Universitas Sumatera Utara*, pp. 1-54, 2009.
- [9] A. Alexander, W. Didik and J. Budiman, "Analisis Kebutuhan Konsumen dan Rekomendasi Perancangan Perumahan dengan Luas Bangunan," *Jurnal Universitas Petra*, pp. 1-8, 2015.
- [10] L. A. K. Wardani, Murahartawaty and L. Ramadani, "Perancangan Tata Kelola Layanan Teknologi Informasi Menggunakan ITIL versi 3 Domain Service Transition Dan Service Operation Di Pemerintah Kota Bandung," *Journal of Information Systems Engineering and Business Intelligence*, pp. 81-87, 2016.
- [11] S. Sebaaou and M. Lamrini, "Implementation of ITIL in a Moroccan company: the case of incident management process," *International Journal of Computer Science Issues*, pp. Vol. 9, Issue 4, No. 3, pp. 30 - 36, 2012.
- [12] M. B. Al Mourad and M. Hussain, "The Impact of Cloud Computing on ITIL Service Strategy Processes," *International Journal of Computer and Communication Engineering*, pp. Vol. 3, No. 5, 2014.

- [13] I. M. Ari and Purwatiningsih, "Analisis Stakeholder Mapping: Studi Kasus pada Professional Products Division L'ORÉAL Indonesia Periode Januari – Juni 2013," *Jurnal Ekonomi Universitas Indonesia*, pp. 1-19, 2013.
- [14] OGC (Office of Government Commerce), ITIL Service Strategy, London, 2011.
- [15] R. A. T. & S. E. Ramadhan, "Perencanaan Business Realtionship Management pada PPTI Stikom Surabaya menggunakan ITIL V3," *Jurnal Sistem informasi & Komputer Akuntansi*, pp. 1-6, 2016.
- [16] A. F. Putri, "Pembuatan Portfolio Layanan TI Bidang Akademik, Kemahasiswaan, Keuangan, dan Sarana Prasarana Berdasarkan Service Strategy ITIL V3 (Studi Kasus: Institut Teknologi Sepuluh November).," Surabaya, 2017.
- [17] I. Safarina, I. K. Raharjana and E. Purwanti, "Perencanaan Arsitektur Perusahaan untuk Pengelolaan Aset di PT. Musdalifah Group menggunakan Kerangka Kerja Zachman," *Journal of Information Systems Engineering and Business Intelligence*, vol. 1, no. 2, pp. 59-72, 2015.
- [18] I. N. Aulia, I. K. Raharjana and Purbandini, "Perencanaan Arsitektur Perusahaan pada Bagian Instalasi Rawat Jalan dengan Kerangka Kerja TOGAF ADM Studi Kasus Rumah Sakit Jiwa Menur Surabaya," *Journal of Information Systems Engineering and Business Intelligence*, vol. 3, no. 1, pp. 52-60, 2017.
- [19] I. K. Raharjana, A. Puspadini and E. Hariyanti, "Information Technology Supplier Management in Hospitals," *Bulletin of Electrical Engineering and Informatics*, vol. 7, no. 2, pp. 306-313, 2018.
- [20] B. P. Santoso, E. Hariyanti and E. Wuryanto, "Penyusunan Panduan Pengelolaan Keamanan Informasi untuk," *Journal of Information*, vol. 2, no. 2, pp. 67-73, 2016.
- [21] H. Nugroho and K. Surendro, "Vocational Higher Education Governance Recommendation Based on Cobit 5 Enabler Generic Model," *Indonesian Journal of Electrical Engineering and Computer Science*, vol. 1, no. 3, pp. 647-655, 2016.
- [22] R. A. Islami, I. M. Sukarsa and I. K. A. Purnawan, "Information Technology Governance Archetype in an Indonesian University," *TELKOMNIKA (Telecommunication, Computing, Electronics and Control)*, vol. 12, no. 7, pp. 5636-5644, 2014.
- [23] R. Ramadhan, T. Amelia and E. Sutomo, "Perencanaan Business Realtionship Management pada PPTI Stikom Surabaya menggunakan ITIL V3," *Jurnal Sistem informasi & Komputer Akuntansi*, pp. 1-6, 2016.
- [24] B. A. Firsya, "Pembuatan IT Service Portfolio berdasarkan Service Strategy ITIL V3 (Studi Kasus: Dinas Kependudukan dan Pencatatan Sipil Kabupaten Jember)," Surabaya, 2015.